
CRYPTOSPORIDIOSIS

Clinical Features: An illness characterized by profuse, watery diarrhea. Other symptoms that may appear include abdominal cramps, loss of appetite, severe weight loss, low-grade fever, nausea, and vomiting. Symptoms often wax and wane and disappear in two weeks among healthy people. Asymptomatic infections are also common.

Causative Agent: *Cryptosporidium* spp., a spore-forming coccidian protozoa. *C. parvum* and *C. hominis* are the most common species affecting humans.

Mode of Transmission: Occurs person-to-person, animal-to-person, waterborne and foodborne via the fecal-oral route. Reservoirs include humans, cattle, and other domestic animals.

Incubation Period: 1 to 12 days (average 7 days)

Period of Communicability: As long as oocysts are present in the stool. Oocysts may be shed in the stool from the onset of symptoms to several weeks after symptoms resolve.

Public Health Significance: *C. parvum* has been the cause of several large waterborne outbreaks (drinking and recreational) in recent decades. The oocysts are highly resistant to normal amounts of chemical disinfectants, including chlorine, and filtration is needed to remove the oocysts from public water supplies.

With a low infectious dose (as low as 10 organisms) and a long shedding period (sometimes up to 2 months), cryptosporidiosis is extremely contagious and may be easily transmitted person-to-person. Attack rates of 30% to 60% have been reported in outbreaks associated with childcare centers.

Though all individuals are at risk for infection, young children and pregnant women may be more susceptible to dehydration. Illness among immunocompromised individuals, especially persons with HIV/AIDS, may be life-threatening.

Reportable Disease in Kansas Since: 1997

Laboratory Criteria for Surveillance Purposes

- Laboratory-confirmed cryptosporidiosis shall be defined as the detection—in symptomatic or asymptomatic persons—of *Cryptosporidium*
 1. oocysts in stool by microscopic examination, **OR**
 2. in intestinal fluid or small-bowel biopsy specimens, **OR**

3. oocyst or sporozoite antigens by immunodiagnostic methods, e.g., ELISA, **OR**
4. by PCR techniques when routinely available, **OR**
5. demonstration of reproductive stages in tissue preparations.

Surveillance Case Definitions

- Confirmed, symptomatic: a laboratory-confirmed case associated with one of the symptoms described above
- Confirmed, asymptomatic: a laboratory-confirmed case associated with none of the above symptoms

Epidemiology and Trends

2005 Kansas Count: 40

	<i>Rate per 100,000</i>	<i>95% CI</i>
Kansas Rate	1.5	(1.0 – 1.9)
U.S. Rate (2004)	1.2	NA

Forty cases were reported during 2005, including seven cases that were identified as part of a waterborne outbreak.* The three-year median from 2002-2004 was 31 cases.

* A detailed outbreak report may be found in Section II of this document, “Special Reports”.